

# International Joint Study Programme on History of Technology Interaction

## Investigating R&D Committee for Technology Interaction History

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## Investigating R&D Committee for Technology Interaction History

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## I. Executive Summary

The Investigation Committee for International Joint Study Programme on History of Technology Interaction (IJSP/HTI) was established under the Technical Committee for History of Electrical Engineering (HEE) in the Institute of Electrical Engineers of Japan (IEEJ) on the 1st day of July, 2005, composed of members from not only IEEJ but also IEEE and KIEE. The scope of study includes technology on power systems (EMTP), computers, circuit breakers, AV machine product R&D and technical education in terms of immigrant engineers or university reform.

### 1. Purpose of Study

The Technical Committee for History of Electrical Engineering (HEE) in the Institute of Electrical Engineers of Japan (IEEJ) has authorized the establishment of The Investigation Committee for International Joint Study Programme on History of Technology Interaction (IJSP/HTI) with its purpose of study as follows;

- (1) to investigate and analyze the issues of Technology Interaction (TI) from historical point of view on engineering for the purpose of appropriate and successful TI, so that keys to the success could be found through the study,
- (2) to investigate and analyze the issues of TI, which is one of the basic issues in the study of engineering history, from global point of view, so that TI should be promoted for engineering innovation and
- (3) to establish the framework for global cooperation to promote the study of engineering history.

As the background for HTI to initiate its study on the history of Technology Interaction there are following concept and joint efforts between IEEJ and IEEE as well as ICEE.

The history study of technology interaction will provide engineers on the globe with internationally common interest and concern, so far as it is discussed on the common historical facts from global point of view. This is the reason why the study on technology interaction history will be one of the most appropriate programme for the international joint effort promoted by global engineers in the world. IJSP/HTI has been proposed from this kind of idea carrying such objectives as to find the key for successful TI, to TI for innovation and to productive framework for IJSP.

In the political and/or industrial arena the terminology of TT (Technology Transfer) has so far been used for technology transferred to make under developing region economically grow. From engineering point of view TT would be much more positively understood as a measure for creating innovative technology. Technology that has supported and developed the civilization is such as transferred beyond the boundary of distance, sector and time, as the Renaissance in Italy and the Industrial Revolution in Britain show to prove.

On the base of this understanding, IJSP/HTI promotes its study with the terminology of not TT but TI (Technology Interaction), which is composed of three categories of region, sector and generation. Much more important is the understanding that human being has been deeply involved in the TI. In another expression, TI without humanity is almost meaningless. This is the reason why IJSP/HTI includes the subject of education (TI between generations) in the programme. The Investigation Committee for International Joint Study Programme on History

of Technology Interaction (IJSP/HTI) was established under the Technical Committee for History of Electrical Engineering (HEE) in the Institute of Electrical Engineers of Japan (IEEJ) on the 1st day of July, 2005, composed of members from not only IEEJ but also IEEE and KIEE. The scope of study includes technology on power systems (EMTP), computers, circuit breakers, AV machine product R&D and technical education in terms of immigrant engineers or university reform.

As the background of HTI activities both the Maui Meeting and ICEE are inevitable from its promotional point of view, because sessions and discussions they organized have supported HTI activities from both organizational and substantial point of view. For instance, rephrasing of TI from TT is one of the results in the discussion of the Maui Meeting VI in London. Much of substance on EMTP discussed in the Report comes from the contents of ICEE Sessions.

### 2. Previous Work

Dr. Nebeker, F., made an excellent introduction to the study of TI (TT at that time) as an introduction to Technology Transfer Session in IEEE/PES Winter Meeting in Singapore, 2000. He discussed firstly the similarity between biological evolution and the historical development of technologies. Then, he discussed the change in historiography over time, concluding his discussion to say, "the study of technology transfer is vital."

Dr. Nam, M. H. reviewed the history of Electrical Engineering in Korea to discuss the essence of Technology Transfer, introducing the research activities in Universities, Korean Society for the History of Technology and Industry (KSoHTI) and the museum. One of important comments in his discussion is that, sixteenth century onwards, Western missionaries worked as envoys of Western medieval science and technology to China



Maui Meeting 1995 in Maui